



The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: Second Tuesday of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the First Tuesday of each month.



PUBLIC SERVICE EVENTS

Interested in helping? Visit <https://www.rars.org/public-service.php>

frequently for our 2019 ham public service schedule.

RARS General Meeting

Topic: Portable Solar Power

By: Ron Morin, KD4LOE

Date: July 9, 2019

Time: Meeting at 7:30PM

Informal gathering and refreshments from 7 - 7:30 p.m.

Where: Ridge Road Baptist Church. 2011 Ridge Rd., Raleigh

New HAM meeting, 6:00 p.m. before member meeting

Tadd Torborg, KA2DEW, New Ham Meeting Coordinator

[Click here for more information.](#)

Presidents Comments

By Carl Davis, W8WZ

As I write this article Summer is in full swing with the start of July and the conclusion of the annual ARRL Field Day. Many thanks to Bob W4TTX and all of the other Field Day leaders and participants. RARS Field Day went very well and a good time was enjoyed by all who participated. I am presently getting ready to operate as one of the K2J volunteers to activate North Carolina as part of the annual 13 Colonies On the Air event which takes place from 1 to 7 July to celebrate our nation's independence.

Summer is a great time for using ham radio outdoors while on picnics or camping trips. Today's lightweight gear and high capacity batteries make outdoor operating easier than ever. Why not take a radio with you the next time you spend some time outdoors? Take some pictures of you operat-

[Continued on page 3](#)

RARS Officers

PRESIDENT

Carl Davis
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w8wz@aol.com

VICE PRESIDENT

Tom Lewis
N4TL
N4TL2@yahoo.com

SECRETARY

Tara Goodwin
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The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website (www.rars.org).

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the Saturday that is ten days before the general meeting. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

For Your Information

RARS General Meeting

Date: Second Tuesday of each month

Location: Ridge Road Baptist Church 2011
Ridge Road Raleigh, NC, 27607

Time: People begin arriving at 7 p.m. The
meeting officially begins at 7:30 p.m.

RARS Monthly Dinner

All members and guests are welcome to
the monthly (first Tuesday) RARS Supper,
6:30PM, at the Golden Corral Restaurant,
6129 Glenwood Ave., Raleigh. Informal and
Dutch, just bring your appetite and best rag to
chew. 73, Chuck, K4HF

RARS Repeaters in Raleigh

146.640 and 444.525

Join us for the nightly RARS net at 8 p.m.
on the 146.640 repeater. All hams holding a
Technician class license or higher are invited
to check in. We welcome both RARS and non-
RARS members to the net.

There is a net Listing on the RARS web-
site click here. <https://www.rars.org/nets.php>

VE Testing

The RARS VEs will accept walk-in testing in
February, May, August and November at
5:30PM, prior to RARS membership meetings
at Ridge Road Baptist Church; the RARSfest
in April; the Cary Swapfest in July; the JARS-
Fest in November; and following RARS license
classes. Please bring a photo ID, your origi-
nal and a copy of your current license, your
\$14 exam fee, and any valid CSCEs that prove
passing elements beyond that of your current
license. Visit <https://www.rars.org> for more in-
formation.

May 2019

RARS Net Monthly Summary

Checkins: 515

Traffic Brought/Passed: 13/12

Minutes: 1079

Sessions: 30

Virginia Enzor NC4VA

RARS Net Manager

Presidents Comments continued

ing in the woods or at the park or the beach and
send them to N4TL to include in the Exciter.
Your pictures may inspire fellow RARS mem-
bers to get out-door active too. They may also
be enjoyed by our members who for any reason
cannot participate in out-door radio activities
themselves.

If you are not much for picnics or camp-
ing trips, then just take an HT with you as you sit
on the porch and check in to our nightly 8 PM
net on the 146.64 that way.

Remember that in August All RARS
Members, Friends and Ham Radio Operators
are invited to have dinner at 6:30 PM on August
1st at the Cracker Barrel located at 955 Airport
Blvd Morrisville, NC with Radio Direction Finding
competitors who will be in town for the Radio
Direction Finding World Championship, which is
being hosted in Raleigh. This is a great way to
enjoy fellowship with other radio hobbyists from
around the world without having to leave Ra-
leigh.

73,
Carl W8WZ

RARS June Membership Meeting



Carl, W8WZ, running the meeting



Bob Starkenburg, W4TTX, Telling everyone about Field Day 2019

There are many pictures from RARS Field Day on [Page 26](#)



RARS members at the June 2019 Meeting

June Membership Meeting, Door Prize winners



Left to right: Mike Butler, K4MBX; Bob Richards, W4GIA; Curt Phillips, W4CP, Anthony O'Conner Jr, K1OC; Ken Latchum, AD4GX; Virginia Enzor, NC4VA and David Hertzberg, KN4CUZ

Future RARS Meeting Topics

Titles, topics, and speakers subject to change.

8/13/2019	What makes FT8 work?	Chuck Till, K4RGN
9/10/2019	Open Source Design Tools for Amateur Radio including KiCAD	Dan Marks, KW4TI
10/8/2019	RARS Officers nominations RARS Auction	Election committee & Carl, W8WZ
11/12/2019	RARS Officers election and Show and Tell. Bring something of interest in Ham Radio that you would like to show off. Be prepared to talk about it. The time will be limited so everyone can have time to show their item.	Election committee & members
12/10/2019	RARS pot luck Holiday party. Sign up at the RARS website. RARS Officers induction.	Election committee

*New HAM meeting, 6:00 p.m. before the
member meeting*

Tadd Torborg, KA2DEW, New Ham meeting Coordinator

*The New Hams meeting is held every month before the regular RARS meeting.
We'll try to start by 6pm. We try to address topics in a manner that will be of help
to hams in their first year of operation.*



Fin NC4FG ran the new-ham meeting in June.

The meeting had 2 not-yet-hams and several new-hams as well as half a dozen experienced hams. Fin led the group in stripping and crimping different kinds of connections including Powerpole connectors. The new hams each made a cable to keep and added power pole connectors to a few small projects including a clock, small power supply, and a 12v LED light strip. The group tested the three products and powered them all up at once.



During the July 9, 2019 meeting, Tom Lewis, N4TL, will talk about the Worked All States Award, the ARRL'S Logbook-of-the-world and DXCC award.

— Tadd, KA2DEW

RARS Birthdays

James	KE4DRN	07/03
John	KN4EQO	07/04
Doug	K1DUG	07/06
Chance	KN4IOS	07/07
Joshua	KB3VKH	07/08
Jeff	KN4LLG	07/08
Rick	KD4PJI	07/08
Steve	AC2AS	07/09
Cathy	KA3QPU	07/09
John	AI4RT	07/10
Bill	W3IMD	07/10
Annette	KB4AQH	07/11
Michael	KN4KWT	07/13
Doug	AD4UL	07/14
Wade	KG4KAH	07/14
Jerry	WA1WHD	07/15
Al	N4EII	07/15
Andy	KN4JJU	07/15
Lowell	K4EUP	07/17

Bob	K4RLC	07/19
Lee	WB4DRJ	07/25
Ferdinand	AD4RC	07/25
Charles	WB4DCM	07/26
Glenn	KS4VA	07/27
Meme	KE4NGM	07/28
William	K4CIA	07/28
Dave	W4YDY	07/29
Bob	KI4YXM	07/30
Scott	KJ4TUC	07/30
Tim	W4TRB	07/30
Tilia	KM4CMQ	07/31

New RARS Members

Sofya Gekht	KM4WAJ
Jean Paul Gagnon	W4MGD
Wes Riffle	KN4UTO
Philip Gresham	KD5IPH
Troy Mitchell	KN4WSO
Ken Brady	KN4UWH

Everyone is welcome!



11:30 AM every Thursday a group of Hams get together for Lunch at Taco Bell. The address is 7036 E Hwy 64 Knightdale, 27545. 1.2 miles east of I540.

<https://>

Become an Amateur Radio Operator



The Raleigh Amateur Radio Society is offering Technician Level

Amateur Radio Licensing Classes

at Sanderson High School - 5500 Dixon Dr, Raleigh, NC 27609

Class Schedule:

Week 1 - Wednesday, 2 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading: Chapters 1 & 2 of The ARRL Ham Radio License Manual

Week 2 - Wednesday, 9 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading: Chapters 3 & 4 of The ARRL Ham Radio License Manual

Week 3 - Wednesday, 16 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading: Chapters 5 & 6 of The ARRL Ham Radio License Manual

Week 4 - Wednesday, 23 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading Chapters 7 & 8 of The ARRL Ham Radio License Manual

Week 5 - Wednesday, 30 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading Chapter 9 of The ARRL Ham Radio License Manual

Week 6 - Wednesday, 6 November 2019 7:00 PM to 9:00 PM

Test Day. Amateur Radio Licensing Tests Administered

Testing fee of \$14 due in cash or check at time of test. Students must bring photo ID, and have an FRN or Social Security Number and bring a black ink pen and #2 pencil. Students may bring a calculator that does not have a memory (or has the memory cleared by a test administrator). The use of smart phones or tablets as calculators is not allowed.

Capacity is limited to 20 students and registration is required. Due to limited seating no walk-ins will be accepted. Students must come with the textbook **ARRL Ham Radio License Manual, 4th edition**, ISBN: 978-1-62595-087-1 which can be purchased at this link: <http://www.arrl.org/ham-radio-license-manual>

To register for the class please visit: https://cs.wcpss.net/index.php?route=llcoursecontroller/course_detail&course_id=1714&cat=0

The non-refundable cost for the course is \$30 payable in cash or check made payable to RARS at the first session. For students over age 18 there is an additional fee of \$14 for the license test payable on the day of the exam.

To ask questions or register for the class please e-mail RARS Education Director Carl Davis at w8wz@aol.com



<https://www.rars.org>

Future Hamfests

A full list of Hamfests can be found at the
[ARRL website.](#)

07/06/2019 | 34th Annual Firecracker Hamfest

Location: Salisbury, NC

Type: ARRL Hamfest

Sponsor: Rowan Amateur Radio Society

Website: <http://www.rowanars.com/events>

07/20/2019 | Mid-Summer SWAPFEST

Location: Cary, NC

Type: ARRL Hamfest

Sponsor: Cary Amateur Radio Club

Website: <http://www.qsl.net/n4nc>

07/27/2019 | WCARS Hamfest 2019

Location: Waynesville, NC

Type: ARRL Hamfest

Sponsor: Western Carolina Amateur Radio Society

Website: <http://www.wcars.org/wcarshamfest.htm>

08/10/2019 | 21st Annual Cape Fear Amateur Radio Society Swapfest

Location: Fayetteville, NC

Type: ARRL Hamfest

Sponsor: Cape Fear Amateur Radio Society

Website: <http://cfarsnc.org>

08/30/2019 | Shelby Hamfest

Location: Shelby, NC

Type: ARRL Hamfest

Sponsor: Shelby Amateur Radio Club

Website: <http://shelbyhamfest.org>

09/20/2019 | W4DXCC SEDCO

Location: Pigeon Forge, TN

Type: DX and Contest Convention

Sponsor: SEDCO

Website: <http://w4dxcc.com/>

Interesting websites

The **June Forsyth Amateur Radio Club Newsletter** is available at the following link.

<http://www.dwepe.com/FARCNewsletters/y2019m06.pdf>

Charles Strickland sent info on **weather proofing coax** this to the Exciter.

<http://static.dxengineering.com/pdf/weatherproofingcoax-techtip.pdf>

They also have this on a short video; however, the resolution is not very good.

https://www.youtube.com/watch?v=6eHgyxo3e9A&list=UU4V4B_mr1mYF5ycGQe_4Ytw&index=6&feature=plcp

Lots of great pictures and audio on this website, **HAM GALLERY**. <http://hamgallery.com/>

Working by Numbers Band, N5OT, WY7YL, W4PA, N0AX, AA4NC, KJ9C

There are 14 ham radio songs on You Tube for this band. At least that is what I found.

<http://hamgallery.com/dayton2018/d18218.htm>

Winners of the 2019 Women in **Open Source Awards**

<https://www.redhat.com/en/blog/announcing-winners-2019-women-open-source-awards>

Future Digital Contesting will include **FT4**

http://physics.princeton.edu/pulsar/k1jt/FT4_Protocol.pdf

PBS Video about the **Asheville Radio Museum**.

https://www.pbs.org/video/asheville-radio-museum-c0fvcf/?utm_source=not%20set&utm_medium=not%20set&utm_campaign=not%20set&utm_term=not%20set&utm_content=not%20set

Interesting websites continued

John Dilks, K2TQN, [website](http://www.k2tqn.net/). John use to write the old time radio column of QST.

<http://www.k2tqn.net/>

“Show VOCAP Predictions” and “show Gray Line Map” with MY DX Summit

Here is a video about spotting. It’s good for beginners. But even for those of us who have been around for a few years can learn something new too.

The YL in this video shows how to do spotting with MY DX Summit. She also shows how to look at the VOCAP Predictions.

When looking at a Callsign in the website, **left click on a call**. You can select four options. Two of them are “Show VOCAP Predictions” and “show Gray Line Map”

<https://www.youtube.com/watch?v=o1ku5AvsLvU>

Curt Phillips, W4CP, sent the following information on [Azimuthal Maps](#) to the RARS email list.

I used this site to generate maps several years ago centered on Raleigh, NC for the Tarheel Scanner/SWL Group. I also used a map from it to show what we did NOT want our Field Day beam aimed due west to talk to California! :-)

[NS6T's Azimuthal Map](#)

For Raleigh enter FM05 and 4000 Km for a USA map.

<https://www.rars.org>

SDR hardware and software

Charles Strickland, WA4OSS, sent the following information on SDR hardware and software to the Exciter.

SDR HARDWARE SOURCES

<https://airspy.com/>

<https://www.sdrplay.com/>

<https://www.nsiradio.com/ColibriNANO-01-55MHz-receiver-p81566523>

https://www.ebay.com/sch/i.html?_sacat=0&_from=R40&_nkw=USB+DVB-T+RTL&rt=nc

SDR SOFTWARE

<https://www.sdr-radio.com/Software/%F0%9F%92%BEDownloads> <http://www.hdsdr.de/>

<https://airspy.com/>

<https://www.sdrplay.com/>

SDR ARTICLES

<https://www.rtl-sdr.com/>

RECEIVERS ONLINE

<https://airspy.com/directory/>

<http://ve3sun.com/KiwiSDR/>

<https://www.globaltuners.com/>

SOUNDCARD OSCILLOSCOPE

https://www.zeitnitz.eu/scope_en

YOUTUBE

<https://www.youtube.com/>

Search YouTube for SDR by brand name and/or item name (hardware or software). It is almost unlimited in viewing of same.

Public Service

There are Public Service Events that you can help with each month.

Click on this link and you can see what ones are coming up.

www.rars.org/public-service.php

ARRL Public Service News.

<http://www.arrl.org/public-service>

2019 Firecracker 100K and 50K Ride

July 4, 2019 - Thursday - Holly Springs, NC

This is a 32 and 62 mile bike event that requires SAGS, as well as Hams assigned to Rest Stops. This event benefits the Greater Carolinas' Multiple Sclerosis (MS) Society and typically has 800+ riders.

* Location: Carolina Brewing Company, 140 Thomas Mill Rd., Holly Springs, NC 27544

* Ham Coordinator: John Stone (K3RHJ)

* Website: [The 27th Annual July 4th Firecracker Ride](http://www.rars.org/public-service.php)

* TO VOLUNTEER, CLICK this link, www.rars.org/public-service.php

2019 Bike MS: Historic New Bern Ride

September 7-8, 2019 - Saturday and Sunday - New Bern, NC

The event features 30, 50, 75 and 100 mile rides each day, requiring SAGS, staff Shadows and Rest Stop Hams. The event benefits the National Multiple Sclerosis (MS) Society and typically draws about 2000 riders.

This year's ride is especially important to support, as New Bern is rebuilding following the hurricane. If you're interested in helping, please sign up early.

* Location: TBD, typically Union Point Park, 210 E Front St, New Bern, NC 28560

* Ham Coordinator: Brian Young (KA9QJT) for Triangle-area Hams, collaborating w/Bruce (KS8L) of New Bern

* Website: Bike MS New Bern Sign Up Genius page will be available later

* Facebook (Optional): [Bike MS Ham Radio Support group](https://www.facebook.com/BikeMSHamRadioSupportGroup)

* Do consider making hotel arrangements now and expand your search to nearby cities.

TO VOLUNTEER, FILL OUT THE FORM AT www.rars.org/public-service.php

RARS Classifieds

Copied from <https://www.rars.org/classifieds.php>

The items below were listed within the last 30 days on the RARS website.

Yaesu FT 250R. HT.

Posted June 26th, 2019 by: WZ0Q

Contact: wz0q@outlook.com

Have a yaesu ft250r HT, with a copy of the manual, also a wall charger. This is a 2 meter only with antenna. Asking \$50.00 or Best Offer. Email me or call.

919-413-5998

Dennis

WZ0Q

For Sale: AEA PK-232 Multi-mode Data Controller

Posted June 20th, 2019 by: KM4EP

Contact: jdiepenb@earthlink.net

Serial number 02635, firmware version 25 Jun 87. Powers up and communicates with PC using Ter-aTerm terminal emulator, but radio interface not tested. Modified to replace Lithium battery with 3xAA. Operation requires 12 V DC power supply, RS-232 cable or FTDI USB to RS-232 cable, and radio cable, all not included. User's Manual also not included, but available from Timewave Technology or on the Web.

Operating modes include:

- Amtor
- ASCII and Baudot RTTY
- Morse code
- Packet

\$30 or best offer

Continued from the previous page

Baofeng UV-5R HT 2 meter/70 cm

Posted June 19th, 2019 by: WZ0Q

Contact: wz0q@outlook.com

Have a like new Baofeng UV-5R ht. comes with original box, manual and all hardware that came with it. I also have a new extra battery for it and a Kenwood spkr mic which work well with it. programmed with all local repeaters, wake, Durham, Johnson counties. Asking \$25.00 for all or \$15.00 for the radio and original accy's.

Dennis

WZ0Q

919-413-5998

Mobile Equipment And, Oh Yeah, Car For Sale

Posted June 11th, 2019 by: NC4EN

Contact: nc4en@arrl.net

I am selling my mobile equipment, which consist of Yaesu FT-857D with 2 SSB filters, TurboTuner II, Little Tarheel Antenna, and VHF/UHF Antenna all for \$900. However, only with the car it is attached to, which I am selling for \$4900. The car is a 2007 Accord with 108100 miles on it. I am the second owner having bought it in 2010. I am saying the car is in fair condition as I have dinged and scuffed it a few times over the years. It has had regular service so runs great. Please contact me if you are interested.

Minutes

Raleigh Amateur Radio Society

Board Members Meeting

Date | time 05/21/2019 @ 7:00 pm | *Meeting called to order by* Carl Davis W8WZ

In Attendance

9 Members

Carl Davis - W8WZ

Tom Lewis - N4TL

Alan Pitegoff - AB4OZ

Chuck Littlewood - K4HF

Richard Kroeger - N1FUA

Tara Goodwin – W4TSW

Murray Merner K4MHM

Robert Starkenburg W4TTX

Greg Seamster – KE4PAX

Approval of Minutes

Quorum present April minutes were approved.

President Report-Carl W8WZ

Present; no report to give

Vice President Report/Exciter Report-Tom N4TL

Tom reported that the presentation for June will be the Field Day by Bob Starkenburg, (W4TTX)
He also reminded the board that the June Exciter articles are due on June 1st.

Treasurer's Report-Greg KE4PAX

Greg reported that we currently have 396 members.

For more detailed information regarding Greg's Treasurers report please contact KE4PAX

Secretary's Report -Tara W4TSW

Present; No Report

Directors Reports

Field Day Chair-Bob W4TTX: Bob said that all plans for Field Day are moving forward successfully and RARS will be either a 7A or 8A. Covington's will be catering the Saturday dinner, as the previous year before, and a 20x20 tent and some chairs have been rented for the event for socializing.

RARSfest Chair-Tara W4TSW: Tara reported that RARSfest went well, though all the final numbers are not in yet. She is looking to get all the information collected to present to the team soon. She gave a brief overview of the attendance numbers and forums.

ARRL Liaison-Chuck K4HF Chuck reports that he has reached out to our ARRL liaison regarding RARSfest applying for the Roanoke Division for the 2020 event.

Education Director-Carl Davis W8WZ: Carl announced that the education team has scheduled their fall class with the wake county schools on Wednesday evenings with several RARS members volunteering to teach various segments. These classes will have a broader scope of advertising, thanks mainly to the school marketing outreach, along with online sign ups. Spring classes will be held on the weekends and more information will be coming later in the year

Minutes continued from the previous page

Webmaster-Hank Montgomery- K4HM Hank was not in attendance but Carl (W8WZ) read an email report that stated the website for both RARS and RARSfest were up to date on current activities, information, and events. There has been discussion with members of RARS on assisting with website maintenance and the possibility of moving the website to a new format. Further discussion by the board also queried some possible members who would be willing to help and they will be sought after in the next few weeks.

Youth Director- Murray Merner K4MHM: Murray reported that the Occoneechee Boy Scouts have their own amateur radio club that him and his team are going to reach out to coordinate with for events.

Non Reports

Immediate Past President-Dennis Keith NC4DK:

ARRL NC Section Manager-Karl BowmanW4CHX:

W4DW/W4RNC TRUSTEE-Jeff Wittich, AC4ZO:

Director-at-Large-Robert Walker K4WWR:

Director-at-Large-Joanne Mars AA3N:

Public Service Director-John Stone K3RHJ:

Public Information Officer-Tara Goodwin W4TSW:

NC QSO Party Chair-Marty Young W4MY:

Food Service Chair-Richard Kroeger N1FUA

FM Repeater Chair-Chuck Littlewood W3WZN:

Director-at-Large-Alan Pitegoff AB4OZ

Net Manager-Virginia Enzor NC4VA

Old Business

Minutes continued from the previous page

New Business

The board, with Greg, discussed the proposed budget that will be presented to the club in the June Meeting. Upon review and discussion, it was decided that the budget was correct and ready to be presented to the club membership at our next meeting.

Additional Business/Comments/Announcements

Next Meeting

6/18/2019, 2011 Ridge Road at 7:00pm

Meeting was adjourned at 8:45pm

Meeting Minutes taken and Submitted by Tara Goodwin W4TSW



Minutes

Raleigh Amateur Radio Society

Members Meeting

Date | time 06/11/2019 @ 7:30pm | *Meeting called to order by* Carl Davis (W8WZ)

In Attendance

The monthly membership meeting of the Raleigh Amateur Radio Society met at the Ridge Road Baptist Church in Raleigh. The meeting was called to order by President Carl Davis (W8WZ), at 7:30 pm.

The pledge of Allegiance was recited

Approval of Minutes

A quorum was present; the May minutes were not approved.

Continuing Announcements

The RARS dinner takes place monthly on the first Tuesday (next: July 2nd) at 6:30p.m. at the Golden Corral; 6129 Glenwood Ave, Raleigh.

The next board meeting, which is open to all our members, will be Tuesday July 18th at 7pm in the church conference room.

Tonight's after-meeting gathering, for any who are interested, will be at the Rudinos at 3101 Edwards Mill Rd, Raleigh.

A new ham/Elmer's meeting with new hams, and anyone interested, takes place before each membership meeting at 6pm at the Ridge Road church and presented by Tadd (KA2DEW)

Door Prizes

There were 8 winners in our door prize drawing.

Mike Butler (K4MBX), Bob Richards (W4GIA), Curt Phillips (W4CP), Anthony O' Conner Jr (K1OC), Ken Latchum (AD4GX), Virginia Enzor (NC4VA), David Hertzbert (KN4CUZ)

Congratulations to our June Winners; you can find their picture on our Facebook page

Vice President Report/Exciter Chair-Tom N4TL

Tom reported that the presentation for July was currently pending due to a scheduling conflict. He asked the membership to keep a lookout in The Exciter for the new presentation.

Treasurer's Report-Greg KE4PAX

Greg was not present; he sent the budget to Carl for membership approval.

For those interested in official Treasurer report can contact Greg (KE4PAX)

Secretary's Report-Tara W4TSW

Present but No Report

Board and Committee Reports

Education Director-Carl W8WZ Carl (W8WZ) announced that the education team has scheduled their fall class with the wake county schools on Wednesday evenings with several RARS members volunteering to teach various segments. These classes will have a broader scope of advertising, thanks mainly to the school marketing outreach, along with online sign ups. Spring classes will be held on the weekends and more information will be coming later in the year.

RARSfest Chair - Tara W4TSW - Carl (W8WZ) Carl announced the RARSfest results. ALL the Fleamarket tables were sold out and the attendance was right in line with last year. About one third of the tickets sold were by pre-registration. By all accounts, we had another successful RARSfest! Put April 11, 2020 on your calendar for the 2020 RARSfest!

Board and Committee with No Report

Public Service - John K3RHJ

Food Service - Richard N1FUA

ARRL Liaison - Chuck K4HF

Youth Director - Murray K4MHM

Past President - Dennis NC4DK

ARRL Section Manager - Karl W4CHX

Webmaster - Hank K4HM

W4DW/W4RNC Trustee - Jeff AC4ZO

Director at Large - Alan AB4OZ

Director at Large - Joanne AA3N

Net Manager - Virginia NC4VA

FM Repeater Chair – Chuck W3WZN

Public Information Officer – Tara W4TSW

NCQSO Party Chair - Marty W4MY

Field Day Chair - Bob W4TTX

Old Business

New Business

Carl (W8WZ) presented the membership with the 2019-2020 budget. There were discussions regarding the new insurance policy and repeater repairs. Once the discussion was completed the membership voted to approve the budget. Carl thanked Greg for the hard work as our treasurer and for preparing the budget.

Additional Business/Comments/Announcements

Minutes continued from the previous page

Next Meeting

07/09/2019, 2011 Ridge Road at 7pm

Meeting was adjourned at 8:53 pm

Meeting Minutes taken and Submitted by Tara Goodwin W4TSW

Zenith

The company Zenith was co-founded by Ralph Matthews and Karl Hassel in Chicago, Illinois, as Chicago Radio Labs in 1918 as a small producer of amateur radio equipment. The name "Zenith" came from ZN'th, a contraction of its founders' ham radio call sign, 9ZN. The co-founders were joined in 1921 by Eugene F. McDonald and Zenith Radio Company was formally incorporated in 1923.

Source: https://en.wikipedia.org/wiki/Zenith_Electronics

Thanks to Charles Good, KM4AMT, who sent this to the Exciter



RARS Field Day 2019

Field Day started with a bang this year – well, not so much a bang as an ear splitting, earth-rattling wail from the Apex Fire Department's Engine 2 manned by Matt Hoina, Sascha Olschewski, and Scott Person. Preparing for Field Day, however, began well before the sirens announced out that it was 1400 UTC on Saturday. The hard work of setting up the Field Day site had begun 24 hours before on Friday when the band captains along with an impressive number of multitalented volunteers turned out to assemble two tribanders, mount them on the Rohn 25 tower sections, and raise the two 30 foot towers into place. The team then raised the 6 meter Yagi on 30 feet of military mast, and helped shoot wire antennas in the trees for 40m, 80m and 160m operations. They set up the tents that would house the operating teams for the next 24 hours. Dennis Keith, NC4DK, rigged the site with all the power we needed to operate safely and effectively. We even had a solar powered station run off a battery bank and Goal Zero Yeti 400 power stations provided by Ron Morin, KD4LOE, and his son Eric, KK4FYZ.

After the blare of the sirens died down the operating teams got to work on their radios logging contacts. Over the next 24 hours the teams would log over 1600 contacts from as close as New Hill, NC and as far away as Alaska and Hawaii. The GOTA team, under the direction of Tadd Torborg, KA2DEW, with help from Doug Wall N3TLV, was especially busy this year with 13 participants logging 77 contacts. Tara Goodwin, W4TSW, logged in over visitors to the Field Day site. Mr. Murphy had his way as usual, with unexpected hiccups along the way. There were noise issues with the original generator plan, but Dennis Keith, NC4DK, wheeled out his trusty old Coleman and got us on track. Other problems with the generators were resolved in a rather unique fashion by Dale Pendleton, W4AUV, (you'll have to ask him about that the next time you see him, hi, hi). Ralph Church, KN4VIB, a newly minted ham and former electrician, helped with wiring problems. The 160 meter team ran into issues with noise and Dan Marks, KW4TI, helped work through that dilemma as well. Jim Carroll, N4CAE, provided a wealth of on the spot hardware, tools, and parts needed to work around problems as they arose. In case you didn't know, Lowe's and Home Depot get all of their stuff from Jim's garage.

Our snackmeister, Richard Kroeger, N1FUA, stocked the big tent with all the provisions needed to get the Field Day participants through the event well fed and well hydrated. Food and drink were in good supply all weekend. Subs and chips on Friday, Chicken, green beans, cake and banana pudding on Saturday, and hot dogs on Sunday kept energy levels up. Fifteen or so hams attended the educational session. Richard Kroeger, N1FUA, discussed SWR related topics, and Ken Latchum,

RARS Field Day 2019, continued

AD4GX, showed the participants some of the finer points of spud gun operation. Traffic was sent from the Carroll farm on Saturday night via Carl Davis, W9WZ. Entertainment via a singing Tesla coil was provided by Dan Marks, KW4TI on Friday night.

Andy Peterson, AA9P, and Ken Latchum surprised the bleary eyed ops with breakfast goodies on Sunday morning. Sunday afternoon saw the official end of this year's Field Day, but not the end of the work. Plenty of volunteers stayed to deconstruct the towers, tribanders, and wire antennas, as well as take down the tents and gear that were buzzing with activity just a short time earlier. The last of the equipment was packed up and moved off site by 6:00 pm, returning the Carroll farm to its quiet, pastoral splendor.

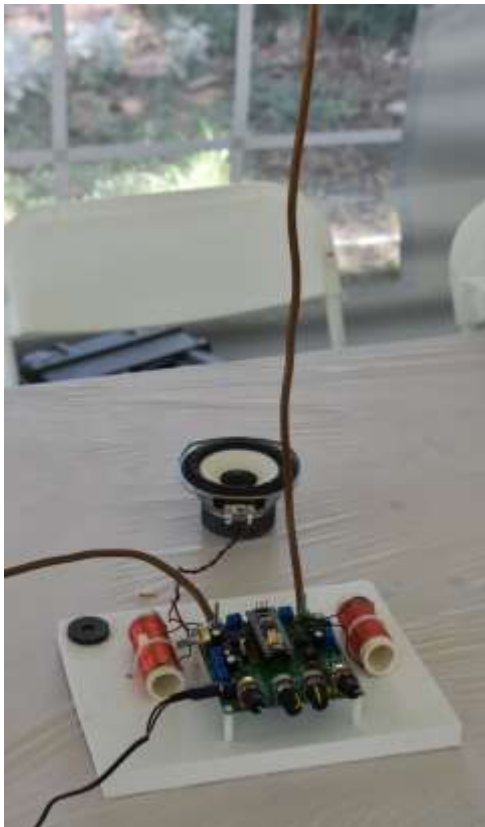
Mark Kilmer, KM4JRH, and I stood there for a few moments after the last vehicle was packed up and gone, marveling at all that had been accomplished by the 2019 Field Day volunteers and participants. A special bond develops between hams during an event like this and that is part of what makes Field Day so special. The end of a contest is always a bittersweet affair for me – tired and numb and glad that everything is over after 24 hours on the air, but still exhilarated by the adrenal rush of working pile ups on a run frequency and busting pile ups while working search and pounce. Field Day is the best of amateur radio – camaraderie, friendship, teamwork, and, of course, playing with all that neat radio gear. I can't wait for next year!

Bob Starkenburg, W4TTX

Special Note: RARS expresses its deep appreciation to Jim and Beth Carroll for their generosity and kindness, without which Field Day 2019 would not have been possible. The author would like to express his sincere thanks to the band captains that made my job very easy. In no particular order, hats off to Carl Davis, W9WZ; Andy Peterson, AA9P, and his son Grant; Curt Phillips, W4CP, and David Burt, W4OFO; Dale Pendleton, W4AUV, and Bob Conder, K4RLC; James Marolda, KE4DRN, and Bob Chew, K4YXM; Tadd Torborg, KA2DEW, and Doug Wall, N3LTV; Tara Goodwin, W4TSW; Richard Kroeger, N1FUA; Joanne Mars, AA3N; Mike Thurman, KB7NLA, and Dillon McDermott, KM4BQO; David Thomas, K4SAN.

Pictures taken at RARS Field Day 2019

RARS was class 8A this year



Dan Marks, KW4TI, [Theremin](#)



All pictures on this page and the next few pages were taken by Tom N4TL. Sorry that there are not pictures of everyone who attended.

There are three pictures at the end that were copied from Facebook. Tara, W4TSW, posted them. There also videos on Facebook that Tara did.

<https://www.facebook.com/RARSFD/>

Continued from the previous page



Lots of tents to shelter the operating positions

Continued from the previous page



Lots of generators to keep the radios on the air

Continued from the previous page



Carl David, W9WZ; Al Sutton, N4EI;
Louis Alexander, K4BYN



Tara Goodwin, W4TSW; Richard Kroeger,
N1UFA; Dale Pendleton, W4AUV



Curt Philips, W4CP; Tony Laszlo, K4AGL



Ralph, KN4VIB; Ron Morin, KD4LOE;
Eric Morin, KK4FYZ



Mark Kilmer, KM4JRH



Dennis Keith, NC4DK; Dave Thomas, K4SAN;
Al Sutton, N4EI

Continued from the previous page



Grant Peterson; Andy Peterson, AA9P



Bob Starkenburg, W4TTX
Field Day Chair



Dillon McDermott, KM4BQO; Daniel Marks, KW4TI



Beth Carroll, KF4QMR; Jim Carroll, N4CAE



Tara Goodwin, W4TSW, Welcome Table

Continued from the previous page



Shaun Coughlan, KC1FZO;
Mike Thurman, KB7NLA



Richard Kroeger, N1FUA



Matt Hoina, Sascha Olschewski, Scott Person

Continued from the previous page



John Honeycutt, N8ZU; Tony O'Conner, K1OC;
Sam Robinson, KN4RWI; Tadd Torborg,
KA2DEW; Doug Wall, N3LTV



Ken Latchum, AD4GX



Bob Chew, K4YXM; James Marolda, KE4DRN

The picture to the right was copied from Facebook. <https://www.facebook.com/RARSFD/>
Thanks to Tara, W4TSW, for posting the video.



Tesla powered fun after dinner!! Thanks to KW4TI

Continued from the previous page



Bruce, KN4IDF



Ralph, KN4VIR

These two pictures were also copied form Facebook.

Two new hams making their first radio contacts. Congrats to them both!!!!

Thanks to Tara, W4TSW, for posting them.



**To All Our RARSfest Staff,
Volunteers, and Guest!!
YOU
Made The Event A SUCCESS!**

TARA —W4TSW

Museum Ships Weekend

One of my favorite operating events of the year is the Museum Ships Weekend which takes place on the first weekend in June. Since moving to North Carolina, I have had the pleasure of being invited by the Azalea Coast Amateur Radio club to join them to staff station NI4BK on the Battle Ship USS North Carolina in Wilmington, NC. The North Carolina was the most decorated US Ship in the Pacific Theater during World War Two. It now serves as a Museum Ship. If you are ever in Wilmington, North Carolina and would like to operate as a guest operator at NI4BK just contact the Azalea Coast Radio club. They will do their best to meet you at the ship. They will give you a special behind the scene tour of radio rooms that are not on the general tour and let you operate. Their webpage is <http://www.ac4rc.org>

In 2019 116 ships participated in the event. At NI4BK we had 13 hams operating over the course of the weekend. We used 40 Meters and 20 Meters and logged 723 QSOs. Since our operating hours were 9A to 5P Eastern Time, we did better on 20 meters than 40. We did all of our work from what was one of the receiver stations on the battleship. This area called "Radio Central" is on the walking tour so we were also able to use the event to enhance the tour experience of the folks visiting the North Carolina that day. We put the CW station in the most visible part of the room and used a loud speaker so that the visitors could hear the CW echo down the hallway. The sound drew them into the room where we were operating. We used an audio splitter box so that the operator could wear headphones without cutting off the sound in the speaker.

Most years we have a handful of CW operators at the event and we have three of us at a time working the CW station. Operator 1 actually works the radio and makes contacts. Operator 2 listens to him and logs. Operator 3 stands to the side and interacts with the tourists on the ship explaining what is going on. When Operator 1 gets tired, everyone switches posi-



USS North Carolina



radio room

tions. This system works very well. This year however, I was the only CW operator working on Saturday. I would say the call sign of the station I was working and someone else would log him based on what I said. I would also explain what I was doing to the visitors as they stopped in while I was working the stations. This was a great exercise in doing two things at once, but it is much easier when there are multiple people working the station.

Since we are on a WW2 Battleship, we usually try to appear as authentic to the impression as possible. Therefore, we use either a straight key or a bug and often use the original receivers. When the ship was in service, ops sat in the receiver room where we were operating and controlled the RCA receivers at their operating position. The key at their desk was patched into a transmitter several decks below them in the transmitter room. Today we put our key in the same place their key was, but we key a small solid-state radio kept out of sight as our transmitter. This year however, we just used the solid-state radios and made most of our contacts on SSB.

The antennas are original to the ship. We use two verticals mounted on the smoke stacks. One gets loaded on 40 Meters and one gets loaded on 20 Meters. They are fed with a solid #6 gage wire that travels through the ship inside of a small steel duct from the transmitter up to the deck where a large bolt comes through the deck through an insulated panel. On the deck, another wire connects to that bolt and goes up to the base of the vertical antenna. So the whole system loads into the transmitter like a long wire. To use a modern transmitter with this antenna we use an impedance matching network and feed it against the ship's hull as ground. Originally, there were also horizontal wire antennas on the ship but those have not stood the



Operation Position



Radio Room 2

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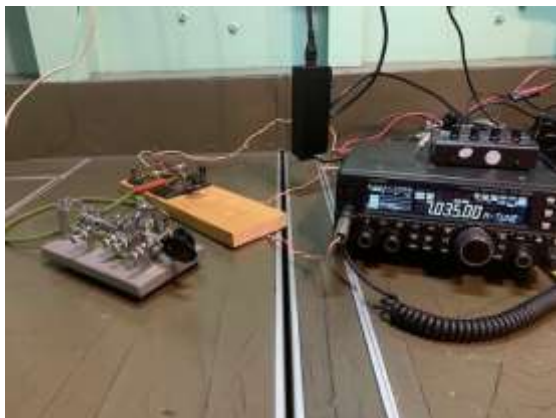
test of time and are no longer present. Also a vertical antenna can be used on 2 meters on the ship. This was used by the ship to communicate with aircraft. That antenna is fed with a primitive form of coax that consists of a center conductor surrounded by Bakelite beads that look like lifesaver candy and covered with metal and rubber. This antenna is used to monitor the local repeater to give guidance to hams who might be on their way to the ship. Since the ship makes a decent faraday cage, cell service is not present below decks.

The hams who participated this year were K4JEL, AJ4JJ, WD4OIN, NT4F, NI2R, KI4JDE, W8WZ, WN4M, N4FAM, KI4YSY, KN4PYT, WA3IRG, WB3FYR.

I brought my grandfather's J38 and connected that to the transmitter. I then patched my Vibroplex Bug into that key with a wedge patch cord and made most of our CW contacts with my bug. For QRS ops, I used it as a sideways straight key. It is a great pleasure to be able to honor the people who served on the USS North Carolina in this small way and to help contribute positively to the experience of the people visiting the ship while we are operating. Thanks to everyone who took time to work us during the event. One final note to stations calling Museum Ship special event stations, please remember that we are often working with very high local noise levels due to the RF noise in the ships from pumps, compressors and things like that. Our unshielded antenna feedline doesn't help with that. Also, the operator is often in a conversation with a tourist, often a child, at the same time he is working you so please be patient if he sends AS or ? more than you think he should!

73,

Carl W8WZ



Keys connected to the
Yaesu Transceiver



Jack Jacobs, WD4OIN